

CHEMISTS' REPORT
— OF —
ADULTERATED ARTICLES
ANALYZED FOR THE
Ohio Dairy and Food Commission

FOR THE YEAR ENDING MAY 1, 1893,

BY

CHIEF CHEMIST H. A. WEBER, Columbus, Ohio;
CHEMISTS A. H. OTTEN, Cincinnati, Ohio;
A. W. SMITH, Cleveland, Ohio;
G. A. KIRCHMAIER, Toledo, Ohio.

F. B. McNEAL, Dairy and Food Commissioner.

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1893.

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STATE OF
VIRGINIA

The following tabular statement gives a summary of the work done by the chemists of the commission for the year ending May 15, 1893.

ARTICLES.	No. of Samples Adulterated.	No. of Samples Pure.	TOTAL.
Allspice.....	7	5	12
Baking Powder.....			9
Bicarbonate Soda.....		1	1
Buckwheat Flour.....	11	6	17
Butter.....	24	15	39
Catsup.....	1		1
Candy.....		1	1
Cayenne Pepper.....		1	1
Chicken Sausage.....	1		1
Canned Salmon.....		1	1
Cider.....	4	2	6
Cinnamon.....	15	3	18
Cloves.....	12	2	14
Coffee.....	56	8	64
Cocoa.....		1	1
Condensed Milk.....	2		2
Condensed Cream.....	1		1
Cream Tartar.....	14	7	21
Ginger.....	12	4	19
Honey.....	2	4	6
Ice Cream.....	1		1
Jelly.....	8	1	9
Lard.....	6	12	18
Maple Syrup.....	12	20	32
Maple Sugar.....		1	1
Molasses.....		1	1
Mustard.....	9	2	12
Milk.....	6	6	12
Oleamargarine.....	30	9	39
Paregoric.....	1		1
Pepper.....	29	12	41
Powdered Sugar.....		1	1
Olive Oil.....	9	3	12
Preservaline.....	2		2
Saratoga Chips.....	1		1
Tea.....		2	2
Vinegar.....	61	32	93
Whiskey.....		5	5
Wine.....	6	24	30
TOTAL.....	341	193	545

Allspice.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
786	.....	New York.....	.....	New York.
790	H. Eicholtz	Casstown.....	S. Zollinger	Piqua, O.
807	S. Zollinger	Piqua, O.....	C. Rupes & Co	New York.
814	C. B. Clark & Co ..	Ironton, O.....	W. H. Crawford & Co.	Baltimore, Md.
128	H. Vanzalk.....	Cleveland, O....	Zipp & Schoendorfer.	Cleveland, O.
1346	S. H. Leapley.....	Troy, O.....	Peoples W. G. Co	Cincinnati, O.
46	Thos. Deck.....	Swanton, O	Toledo Spice Co.	Toledo, O.

ANALYSIS OF SAMPLES.

786	Fat	1.93	
	Ash	2.15	
	Consists of ground cocoanut shells and allspice.		
	Imitation allspice.		
			H. A. WEBER, Chemist.
790	Ash.....	9.54	
	Consists of allspice, mustard hulls, some pro-		
	duct of wheat, and about 5% mineral matter.		
			H. A. WEBER, Chemist.
807	Ash	3.80	
	Consists of ground crackers and allspice.		
			H. A. WEBER, Chemist.
814	Ash	2.61	
	Consists of roasted bread and allspice.		
			H. A. WEBER, Chemist.
128	Ash	4.96	
	Allspice	20.00	
	Wheat, husks, turmeric and charcoal.....	80.00	
			A. W. SMITH, Chemist.
1346	Ash	18.10	
	Clay	15.00	
	Turmeric and wheat flour	33.00	
	Allspice	52.00	
			G. A. KIRCHMAIER, Chemist.
46	Ash.	4.70	
	Allspice about.....	75.00	
	Clove stems.....	25.00	
			G. A. KIRCHMAIER, Chemist.

Cinnamon.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS	PRODUCER.	ADDRESS.
785		New York		New York.
791	L. C. Young	Piqua, O	Potter Parlin Co.	Cincinnati, O.
801	John Dabus	Piqua, O	S. Zollinger	Piqua, O.
810	J. N. Corey	New Carlisle, O.	Dayton Spice Co.	Dayton, O.
818	W. A. Murdock	Ironton, O.	Lafayette Spice Co	Philadelphia, Pa.
819	W. A. Murdock	Ironton, O.	A. C. Colburn & Co.	"
849	Aurbaugh	Martin's Ferry	A. C. Colburn & Co.	"
850	C. & J. Tea Store	Steubenville, O.	A. C. Colburn & Co.	"
851	R. Smith	Uhrichsville, O.	A. C. Colborn & Co	"
852	McCabe	Martin's Ferry	A. C. Colburn & Co.	"
856	J. B. Fulton	Athens, O	A. C. Colburn & Co.	"
868	J. Hannon	Ironton, O.	Ball Warfield Drug Co.	Ironton, O.
43	S. H. Leapley	Troy, O	Peoples W. G. Co	Cincinnati, O.
45	Thos. Deck	Swanton, O.	Toledo Spice Co.	Toledo, O.

ANALYSIS OF SAMPLES.

785	Fixed oil	2.61
	Ash	3.59
	Consists of ground cocoanut shells cassia and imitation Cinnamon.	

H. A. WEBER, Chemist.

791	Ash	6.00
	Cinnamon, about	50.00
	Sago flour, about	50.00

H. A. WEBER, Chemist.

801	Ash	2.75
	Sago flour, about	50.00
	Cassia, about	50.00

H. A. WEBER, Chemist.

810	Ash	18.25
	Consists of gypsum and red ochre	15.00
	Mustard hulls, crackers or bread, cocoanut shells and a little cinnamon or cassia.	

H. A. WEBER, Chemist.

818	Ash	5.38
	Consists of turmeric and cassia.	

H. A. WEBER, Chemist.

819	Ash	28.65
	Consists of gypsum and red ochre.....	25.00
	Exhausted turmeric, rice hulls and very little cassia. Artificially flavored with essential oils. Labelled "East India Cinnamon."	
	H. A. WEBER, Chemist.	
849	Ash	2.95
	Consists of red sago, cocoanut shells and cassia.	
	H. A. WEBER, Chemist.	
850	Ash	2.84
	Consists of red and white sago chiefly, roasted cocoanut shells and cassia.	
	H. A. WEBER, Chemist.	
851	Ash.....	12.73
	Consists of gypsum	10.00
	Mustard hulls, red and white sago, cocoanut shells and cinnamon.	
	H. A. WEBER, Chemist.	
852	Ash	11.93
	Consists of gypsum	10.00
	sago and cassia.	
	H. A. WEBER, Chemist.	
856	Ash	7.00
	Low grade of cassia.	
	H. A. WEBER, Chemist.	
868	Ash	8.70
	Consists of red ochre.....	6.00%
	Corn meal and starch chiefly and a little cassia. The corn product was exceedingly fine, probably cerealine.	
	H. A. WEBER, Chemist.	
43	Ash	6.30
	Cassia, about.....	75.00
	Wheat flour.....	25.00
	G. A. KIRCHMAIER, Chemist.	
45	Ash	2.80
	Cassia, about.....	75.00
	Ginger, allspice and pepper	25.00
	G. A. KIRCHMAIER, Chemist.	

Cloves.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
784	.....	New York	.....	New York.
798	M. Fox	Piqua, O	S. Zollinger	Piqua, O.
799	L. C. Young	Piqua, O	Potter Parlin Co.	Cincinnati, O.
815	W. A. Murdock	Ironton, O	W. H. Crawford & Co.	Baltimore, Md.
816	W. H. Lynd	Ironton, O	W. H. Crawford & Co.	"
817	C. B. Clark & Co.	Ironton, O	W. H. Crawford & Co.	"
895	H. M. Francisco	Ironton, O	W. A. Murdock	Ironton, O.
855	R. Smith	Uhrichsville, O	A. Colburn Co	Philadelphia, Pa.
896	M. E. Fox	Ironton, O	W. A. Murdock	Ironton, O.
117	H. Vanzalk	Cleveland, O	Zipp & Schorndorfer	Cleveland, O.
47	J. C. Huken & Co	Cincinnati, O	.....	.....
44	Thos. Dick	Swanton, O	Toledo Spice Co.	Toledo, O.

ANALYSIS OF SAMPLES.

784	Fixed fat.....	5.05
	Ash	3.08
	Consists of roasted cotton seed, meal and a little allspice.	
	Imitation cloves	

H. A. WEBER, Chemist.

798	Ash	3.70
	Fixed fat.....	3.29
	Olive stones, roasted cocoanut shells and allspice, together about	66.66
	Cloves about.....	33.33

H. A. WEBER, Chemist.

799	Ash.....	9.33
	Spent cassia, about.....	50.00
	Allspice, about	50.00

H. A. WEBER, Chemist.

.....	14.52
Consists of Gypsum and red ochre	10.00
Rice hulls, rice flour, roasted cocoanut shells, ems and a little cloves.	

H. A. WEBER, Chemist.

816	Ash.....	3.45	
	Consists of olive stones chiefly, rice hulls, allspice and a little cloves.		H. A. WEBER, Chemist.
817	Ash	2.93	
	Consists of olive stones chiefly, allspice and a little cloves.		H. A. WEBER. Chemist.
855	Ash	8.18	
	Consists of clove stems, allspice, lentils and cloves.		H. A. WEBER, Chemist.
895	Ash	10.08	
	Consists of roasted cocoanut shells, allspice, lentils, rice hulls and cloves.		H. A. WEBER, Chemist.
117	Ash.....	3.75	
	Volatile oil.....	7.22	
	Fixed oil	4.51	
	Consists of large amount of roasted husks, turmeric, and small amount of cloves.		A. W. SMITH, Chemist.
896	Ash.....	8.45	
	Consists of roasted cocoanut shells, allspice, clove stems and cloves.		H. A. WEBER, Chemist.
47	Cloves	50.00	
	Clove stems.....	50.00	
			A. H. OTTEN, Chemist.
44	Ash	7.50	
	Cloves, about	70.00	
	Ginger, allspice and pepper.....	30.00	
			G. A. KIRCHMAIER, Chemist.

Coffee.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
707	Smith & Moore	Columbus, O.	O. Coffee & Spice Mills.	Columbus, O.
708	C. M. Young	Wash. C. H., O.	Eagle Spice Mills.	Dayton, O.
719	J. A. Funk	Springfield, O.	Plantation Coffee Co.	New York.
720	J. A. Funk	Springfield, O.	Arbuckle & Co.	New York.
727	M. Halloran	Ironton, O.	Dayton Spice Co.	Dayton, O.
728	M. Halloran	Ironton, O.	Miami Manuf'g Co.	Cincinnati, O.
729	Stark, Boal & Co.	Steubenville, O.	Canby, Ach & Co.	Dayton, O.
733	C. Binge	Toledo, O.	Toledo Spice Co.	Toledo, O.
734	M. Nadolny	Toledo, O.	Eagle Spice Co.	Toledo, O.
743	A. Krotz	Defiance, O.	R. M. Weir	New York.
748	J. Troutman	Springfield, O.	J. A. Funk	Springfield, O.
749	J. Troutman	Springfield, O.	Sunrise Coffee Co.	Dayton, O.
750	J. A. Funk	Springfield, O.	Tea Leaf Tea Co.	Springfield, O.
751	J. Weissel	Springfield, O.	J. A. Funk	Springfield, O.
753	J. A. Funk	Springfield, O.		
763	J. J. Brenan	Marietta, O.	Arbuckle	Pittsburg, Pa.
777	R. M. Roach & Co.	Athens, O.	Ross, Weir & Co.	New York.
778	J. R. Harvey	Athens, O.	Miami Manuf'g Co.	Cincinnati, O.
779	A. L. Roach	Athens, O.		
780	Harper.		Domestic B. P. Co.	Cincinnati, O.
781	M. Halloran	Ironton, O.	C. F. Ware	Dayton, O.
782	M. Fox	Piqua, O.	Harvey, Hagen & Co.	Huntington, W. Va.
783	H. H. Minders	Piqua, O.	Pen. C. Mills	Jackson, Mich.
805	F. J. Baur	Columbus, O.	Reid, Murdock & Co.	Chicago, Ill.
820	W. A. Murdock	Ironton, O.	F. W. Daisz	Philadelphia, Pa.
838	China Tea Store	Uhrichsville, O.		
839	Aurbaugh	Martin's Ferry		
859	Schmidt & Furgeson	E. Liverpool, O.	A. B. Gates	Indianapolis, Ind.
860	Atlantic Tea Co.	E. Liverpool, O.		
861	J. Peak	E. Liverpool, O.		
874	J. F. Horney	Portsmouth, O.	B. Augustine	Portsmouth, O.
11	At. & Pac. Tea Co.	Cleveland, O.		
17	At. & Pac. Tea Co.	Cleveland, O.		
18	U. Pacific Tea Co.			
30	At. & Pac. Tea Co.	Cleveland, O.		
33	A. J. Wenham's Sons	Cleveland, O.	Bonanza Coffee Co.	New York.
34	U. Pacific Tea Co.	Cleveland, O.	Same	New York.
42			Smith & Curtis	Cleveland, O.
43	D. B. Cottom	Cleveland, O.	Home Tea Co.	"
48	D. B. Cottom	Cleveland, O.	Home Tea Co.	"
49	D. B. Cottom	Cleveland, O.	Home Tea Co.	"
51	U. Pacific Tea Co.	Youngstown, O.	U. Pacific Tea Co.	New York.
54	Chas. Fox	Cleveland, O.		
55	C. R. Lublien	Cleveland, O.	Smith & Curtis	Cleveland, O.
80	W. F. Snyder	Youngstown, O.		

Coffee.

DESCRIPTION OF SAMPLES—Concluded.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
90	Gt. Eastern Tea Co.	Massillon, O.		
91	Gt. Eastern Tea Co.	Canton, O.		
97	F. S. McCloud.	Canton, O.		
118	C. H. Elberson	Canton, O.		
119	Miller & Roach.	Akron, O.		
120	I. Reader.	Akron, O.		
121	C. W. Bonstedt	Akron, O.	Hygienic Coffee Works.	Syracuse, N. Y.
122	Best & Co.	Canton, O.		
124	Albrecht	Akron, O.		
51	S. R. Mitchell	Midland City, O.	McKeehan Heister Co.	Hillsboro, O.
120	F. H. Bemis & Co.	Cincinnati, O.	Renner & Co.	Cincinnati, O.

ANALYSIS OF SAMPLES.

707	Coffee	33.33
	Chicory and substitute	66.66
	H. A. WEBER, Chemist.	
708	Coffee	33.00
	Chicory	6.60
	Substitute	60.00
	H. A. WEBER, Chemist.	
719	Coffee	43.00
	Chicory	3.00
	Barley	3.00
	Pease	6.00
	Damaged Coffee (black)	2.00
	Fine mixture of above	43.00
	H. A. WEBER, Chemist.	
720	This sample was found to be coffee screenings, being highly adulterated with coffee shells and damaged (black) coffee.	
	H. A. WEBER, Chemist.	
727	Coffee	25.00
	Pease (flattened)	15.00
	Coffee substitute	18.00
	Chicory	2.00
	Fine mixture of above	40.00
	H. A. WEBER, Chemist.	

- 728** Coffee61.00
Pease (flattened).....37.00
Chicory..... 2.00
H. A. WEBER, Chemist.
- 729** Coffee28.00
Coffee substitute.....67.00
Chicory..... 5.00
H. A. WEBER, Chemist.
- 733** Coffee33.33
Adulterants.....66.66
The adulterants are chicory, rye, pease and
beans.
H. A. WEBER, Chemist.
- 734** Coffee33.33
Adulterants.....66.66
The adulterants are rye, wheat, bran pellets
and chicory
H. A. WEBER, Chemist.
- 743** Coffee47.00
Pease.....41.00
Chicory10.00
Damaged coffee (black)..... 2.00
H. A. WEBER, Chemist.
- 748** Coffee29.00
Pease..... 5.00
Rye 2.00
Chicory 1.00
Wheat bran pellets..... 1.00
Fine mixture of above.....62.00
H. A. WEBER, Chemist.
- 749** Coffee25.00
Rye, peas and chicory.....75.00
H. A. WEBER, Chemist.

750	Coffee	90.00	H. A. WEBER, Chemist.
	Chicory	2.00	
	Pease	3.00	
	Wheat bran pellets	5.00	
751	Coffee	60.00	H. A. WEBER, Chemist.
	Brickdust	5.00	
	Wheat bran pellets and chicory	35.00	
753	Coffee	38.00	H. A. WEBER, Chemist.
	Chicory	3.00	
	Pease	4.00	
	Wheat bran pellets	2.00	
	Mixture of above	53.00	
763	Coffee	75.00	H. A. WEBER, Chemist.
	Damaged coffee (black)	19.00	
	Coffee shells	2.00	
	Wood and bark	4.00	
777	Coffee	45.00	H. A. WEBER, Chemist.
	Wheat bran pellets	54.00	
	Chicory	1.00	
778	Coffee	60.00	H. A. WEBER, Chemist.
	Lentils and chicory	40.00	
779	Coffee	None	H. A. WEBER, Chemist.
	Coffee substitute and chicory	100.00	
780	Coffee	None	H. A. WEBER, Chemist.
	Coffee substitute and chicory	100.00	

781	Coffee	78.50	
	Pebbles	10.50	
	Wood and bark	5.00	
	Coffee shells	2.50	
	Damaged Coffee	3.50	
	This is a sample of coffee screenings.		
	H. A. WEBER, Chemist.		
782	Coffee	45.00	
	Cereals and chicory	55.00	
	H. A. WEBER, Chemist.		
783	Coffee	30.00	
	Chicory, cereals and pease	70.00	
	H. A. WEBER, Chemist.		
805	Coffee	66.66	
	Pease	33.33	
	H. A. WEBER, Chemist.		
820	Ash	6.16	
	Consists of corn meal, shells, chicory extract, produces a highly colored solution due to caramel. Contains no coffee or coffee extract.		
	H. A. WEBER, Chemist.		
838	Coffee	57.00	
	Wheat, bran pellets and shells	43.00	
	H. A. WEBER, Chemist.		
839	Coffee	15.00	
	Rye, bread, pease and brick dust	85.00	
	H. A. WEBER, Chemist.		
859	Cold water extract	1.30%	
	Coffee coated. Coating contains paraffine		
	H. A. WEBER, Chemist.		
860	Coffee	74.00	
	Damaged coffee (black)	18.00	
	Coffee shells	2.00	
	Wood	2.00	
	Pebbles	4.00	
	Coffee screenings		
	H. A. WEBER, Chemist.		

861	Coffee	25.00
	Roasted bread, bran pellets, pease and pea shells.....	75.00
	H. A. WEBER, Chemist.	
874	Coffee	46.00
	Chicory.....	16.00
	Pease.....	38.00
	H. A. WEBER, Chemist.	
11	Coffee.....	55.00
	Chicory.....	45.00
	A. W. SMITH, Chemist.	
17	Coffee	55.00
	Chicory	45.00
	A. W. SMITH, Chemist.	
18	Coffee	65.00
	Chicory.....	35.00
	A. W. SMITH, Chemist.	
30	Coffee	55.00
	Chicory.....	45.00
	A. W. SMITH, Chemist.	
33	Coffee	45.60
	Chicory.....	29.80
	Corn and Pease.....	24.60
	A. W. SMITH, Chemist.	
34	Coffee	50.00
	Chicory.....	35.00
	Corn and Pease.....	15.00
	A. W. SMITH, Chemist.	
42	Coffee	50.00
	Chicory.....	30.00
	Pease and Wheat.....	20.00
	A. W. SMITH, Chemist.	

- 43** Coffee50.00
Chicory35.00
Pease.....15.00
A. W. SMITH, Chemist.
- 48** Coffee60.00
Chicory20.00
Pease.....20.00
A. W. SMITH, Chemist.
- 49** Coffee50.00
Chicory20.00
Pease.....30.00
A. W. SMITH, Chemist.
- 51** Coffee60.00
Chicory25.00
Pease.....15.00
A. W. SMITH, Chemist.
- 54** Coffee75.00
Chicory15.00
Pease.....10.00
A. W. SMITH, Chemist.
- 55** Coffee75.00
Chicory10.00
Pease.....15.00
A. W. SMITH, Chemist.
- 80** Coffee50.00
Chicory30.00
Beans20.00
A. W. SMITH, Chemist.
- 90** This sample consists of roasted beans and
pease, some wheat and a very little coffee.
A. W. SMITH, Chemist.
- 91** Coffee65.00
Chicory20.00
Coffee hull, pease, hairs, dirt and wood....15.00
A. W. SMITH, Chemist.

97	Coffee	65.00	
	Pease.....	15.00	
	Chicory.....	20.00	A. W. SMITH, Chemist.
118	Coffee	30.00	
	Chicory.....	35.00	
	Beans	35.00	A. W. SMITH, Chemist.
119	Coffee	60.00	
	Chicory.....	20.00	
	Pease, wheat, etc.....	20.00	A. W. SMITH, Chemist.
120	Coffee	50.00	
	Chicory.....	35.00	
	Pease.....	15.00	A. W. SMITH, Chemist.
121	Consists of roasted rye, barley hulls and contains no coffee.		A. W. SMITH, Chemist.
122	Coffee	85.00	
	Stones, dirt, etc.....	15.00	A. W. SMITH, Chemist.
124	Coffee	90.00	
	Stones, dirt, etc.....	10.00	A. W. SMITH, Chemist.
51	Coffee	40.00	
	Substitute	60.00	A. H. OTTEN, Chemist.
120	Coffee	None	
	Raosted Malt.....	100.00	LOUIS SCHMIDT, Chemist.

Cream of Tartar,

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
811	J. N. Cory	New Carlisle	Dayton Spice Co	Dayton, O.
825	W. G. Hathaway	Columbus, O		
826	J. H. Jackson	Columbus, O		
827	Bennett & Host	Columbus, O		
828	E. J. Crane & Son	Columbus, O	Isaac Eberly	Columbus, O.
829	Flag Grocery	Columbus, O	E. R. Durkee	New York.
830	Hawk & Hawk	Columbus, O		
831	G. F. Wheeler	Columbus, O	C. E. Freeman	Columbus, O.
836	Baker's	New York		
857	J. B. Fulton	Athens, O		
897	H. M. Francisco	Ironton, O	W. A. Murdock	Ironton, O.
99	Beckel & Demoulin	Canton, O	Silver King Spice Co.	New York.
131	F. S. McCloud	Akron, O		
36	S. H. Leapley	Troy, O	People's W. G. Co.	Cincinnati, O.

ANALYSIS OF SAMPLES.

811	Cream Tartar	13.17
	Alum	None
	Acid Phosphate	None
	Gypsum	73.38
	Calcium phosphate and moisture	None
	Starch	13.45
	H. A. WEBER, Chemist.	
825	Cream Tartar	None
	Alum	6.81
	Acid Phosphate	10.43
	Gypsum	41.46
	Starch	41.30
	H. A. WEBER, Chemist.	
826	Cream Tartar	33.26
	Gypsum	66.74
	H. A. WEBER, Chemist.	
827	Cream Tartar	None
	Alum	13.62
	Acid Phosphate	14.90
	Gypsum	26.04
	Starch	45.44
	H. A. WEBER, Chemist.	

828	Cream Tartar	None
	Acid Phosphate	14.90
	Gypsum	65.10
	Starch	20.00
H. A. WEBER, Chemist.		

829	Cream Tartar	None
	Acid Phosphate	13.41
	Gypsum	42.77
	Starch	43.82
H. A. WEBER, Chemist.		

830	Cream Tartar	22.57
	Alum	8.94
	Gypsum	53.20
	Starch	15.29
H. A. WEBER, Chemist.		

831	Cream Tartar	50.78
	Acid Phosphate	10.27
	Gypsum	9.39
	Starch	29.56
H. A. WEBER, Chemist.		

836	Cream Tartar	None
	Acid Phosphate	22.35
	Gypsum	40.39
	Calcium phosphate and moisture	21.56
	Starch	15.70
H. A. WEBER, Chemist.		

857	Cream Tartar	None
	Acid Phosphate	22.35
	Gypsum	54.05
	Starch	23.60
H. A. WEBER, Chemist.		

897	Cream Tartar	None
	Acid Phosphate	8.17
	Gypsum	48.13
	Starch	43.70
H. A. WEBER, Chemist.		

99	Cream Tartar	None
	Acid Phosphate.....	42.70
	Gypsum	41.10
	Starch	16.20

A. W. SMITH, Chemist.

131	Cream Tartar	None
	Acid Phosphate.....	30.30
	Gypsum	45.00
	Starch	24.70

A. W. SMITH, Chemist.

36	Cream Tartar	26.32
	Gypsum	31.10
	Starch	36.10

G. A. KIRCHMAIER, Chemist.

Ginger.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
787	.....	New York.....	.....	New York.
788	J. C. Knoop.....	Casstown, O.....	Crossley & Adamson ..	Dayton, O.
789	H. H. Meinders.....	Piqua, O.....	Silver King Spice Co.	New York.
802	L. C. Young	Piqua, O.....	Potter Parlin Co.....	Cincinnati, O.
803	John Dabus	Piqua, O.....	S. Zollinger	Piqua, O.
809	J. N. Corry	New Carlisle, O.	Dayton Spice Co.....	Dayton, O.
840	E. E. Potts.....	Steubenville, O.....	.....	.....
841	McCabe	Martin's Ferry O.....	.....	.....
844	C. & J. Tea Store...	Steubenville, O.....	.....	.....
845	J. L. Higgins	Bridgeport, O.....	.....	.....
878	Atlantic Tea Co.....	E. Liverpool, O.....	.....	.....
1347	S. H. Leapley.....	Troy, O.....	People's W. G. Co.....	Cincinnati, O.

ANALYSIS OF SAMPLES.

787	Ash	12.14
	Consists of rice hulls, rice flour and mineral matter.	
	Imitation Ginger.	

H. A. WEBER, Chemist.

788	Ash.....	6.98
	Consists of ginger, rice hulls and rice flour.	

H. A. WEBER, Chemist.

789	Ash.....	4.15
	Consists of ginger, rice hulls, rice flour.	

H. A. WEBER, Chemist.

802	Ash	8.45	
	Slightly adulterated with rice flour		H. A. WEBER, Chemist.
803	Ash	9.18	
	Slightly adulterated with corn meal and ocher.		H. A. WEBER, Chemist.
809	Ash	22.50	
	Consists of gypsum.....	20.00%	
	Rice hulls, turmeric and ginger.		H. A. WEBER, Chemist.
840	Ash	3.13	
	Consists of corn meal and ginger.		H. A. WEBER, Chemist.
841	Ash	28.80	
	Gypsum	25.00	
	Ginger and turmeric.....	75.00	
			H. A. WEBER, Chemist.
844	Ash	3.85	
	Consists of rice flour, corn meal and ginger.		H. A. WEBER, Chemist.
845	Ash	5.10	
	Consists of rice flour, turmeric and ginger.		H. A. WEBER, Chemist.
878	Ash	23.02	
	Gypsum	20.00	
	Turmeric and ginger.....	80.00	
			H. A. WEBER, Chemist.
1347	Ash	2.50	
	Ginger, about	66.00	
	Wheat flour, about.....	33.00	
			G. A. KIRCHMAIER, Chemist.

Honey.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
885	A. M. Helms	Steubenville, O.	Bucannon & Sons	W. Va.
886	M. Halloran	Ironton, O.	Crinkshank & Bros.Co.	Allegheny, Pa.

ANALYSIS OF SAMPLES.

885	Reducing sugar.....	55.54
	Cane sugar	13.00
	Dextrine, etc.....	16.56
	Water	14.80
	Ash	0.10
	Adulterants, cane sugar and glucose.	

H. A. WEBER, Chemist.

886	Reducing sugar.....	55.54
	Cane sugar	None
	Dextrine, etc.....	23.33
	Water	21.10
	Ash.....	0.30
	Adulterant, glucose.	

H. A. WEBER, Chemist.

Maple Syrup.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
893	.....	.....	.....	.....
101	Mathews	Massillon, O....	American Preserve Co.	Cincinnati, O.
102	T. Morgan & Co.....	Massillon, O....	J. Davis & Co.....	Detroit, Mich.
58	G. F. Eich.....	Cincinnati, O....	Colter & Co	Cincinnati, O.
59	C. W. Newkirk	Cincinnati, O....	C. Hein & Co.....	"
64	C. Burkhardt	Cincinnati, O....	Hopple, Flach & Co....	"
69	Gr. W. Tea Co	Cincinnati, O....	American Preserve Co.	"
73	C. W. Newkirk	Cincinnati, O....	C. H. Hein & Co.....	"
77	C. Burkhardt	Cincinnati, O....	Hopple, Flach & Co....	"
97	T. J. Wanstrath.....	Cincinnati, O....	Williams Bros.....	Detroit, Mich.
101	I. J. Portwood.....	Cincinnati, O....	A. E. Idlett & Co	Cincinnati, O.
110	H. Scheut	Cincinnati, O....	Woodst'k Maple Syr. Co.	St. Louis, Mo.

ANALYSIS OF SAMPLES.

No.	Reducing Sugar.	Cane Sugar.	Dextrine, Etc.	Water.	Ash.	Adulterant.	Chemist.
893	28.80	25.40	16.52	28.64	0.64	½ Glucose	H. A. Weber.
101	19.90	37.00	12.30	30.50	0.30	½ Glucose	A. W. Smith.
102	33.90	32.70	.....	26.90	2.23	Glucose	"
58	17.69	36.00	.....	36.00	0.23	Glucose 30%	A. H. Otten.
59	50.79	4.95	.....	30.83	0.23	Glucose 90%	"
64	28.12	34.24	.....	28.12	0.27	Glucose 45%	"
69	22.12	37.61	.....	29.35	0.28	Glucose 40%	"
73	38.43	4.31	.....	29.15	0.17	Glucose 65%	"
77	33.33	9.70	.....	30.16	0.23	Glucose 60%	"
97	31.25	9.26	.....	25.69	0.16	Glucose 60%	Prof. Westenhoff.
101	28.50	16.10	.....	24.29	0.57	" Molasses	"
110	19.00	29.47	.....	27.27	0.30	Glucose 30%	"

Mustard.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
717	Carson & Fox	Springfield, O . .	Silver King Spice Co..	New York.
771	Gulick & St. Clair . . .	Zanesville, O . .	P. P. Kelly & Co.	Zanesville, O.
853	R. Smith	Uhrichsville, O.	A. Colburn & Co.	Philadelphia, Pa.
854	J. L. Higgins	Bridgeport, O.		
879	Atlantic Tea Co.	E. Liverpool, O.		
880	Atlantic Tea Co.	Steubenville, O.	H. Bristol	
906	E. Gilmore	Bridgeport, O.		
907	Atlantic Tea Co.	Bellaire, O.	J. M. Jeffers	
98	Rice & Goetz	Cleveland, O. . . .	Ruppender Bros.	Cleveland, O.

ANALYSIS OF SAMPLES.

717	Ash	4.12	
	Contains wheat flour.		H. A. WEBER, Chemist.
771	Ash	3.60	
	Highly adulterated with wheat flour.		H. A. WEBER, Chemist.
853	Ash	2.15	
	Mustard	40.00%	
	Flour and turmeric	60.00%	
			H. A. WEBER, Chemist.
854	Ash	5.00%	
	Mustard	75.00%	
	Flour and turmeric	25.00%	
			H. A. WEBER, Chemist.
879	Ash	2.60%	
	Fixed oil	7.10	
	Mustard	19.72	
	Flour and turmeric	80.28	
			H. A. WEBER, Chemist.
880	Ash	3.30	
	Fixed oil	6.40	
	Mustard	17.77	
	Flour and turmeric	82.23	
			H. A. WEBER, Chemist.

906	Ash	3.80
	Fixed oil	7.60
	Mustard	21.00%
	Flour and turmeric	79.00%
H. A. WEBER, Chemist.		
907	Ash	7.10
	Fixed oil	18.80
H. A. WEBER, Chemist.		
98	Total solids	19.40
	Flour, about	10.00
	Mustard, about	9.00
	Acetic acid	2.38
	Prepared Mustard	
A. W. SMITH, Chemist.		

Oleomargarine.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
693	J. F. Mitchell.....	Cleveland, O....	Union Dairy Co.....	Cleveland, O
694	Fishack & Co.....	Cleveland, O....	Swift.....	Chicago, Ill.
695	James Holmes.....	Cleveland, O....	Union Dairy Co.....	Cleveland, O.
696	C. Gansler	Cleveland, O....	Armour.....	Chicago, Ill.
697	C. F. Gendrich	Cleveland, O....	Union Dairy Co.....	Cleveland, O.
698	C. F. Gendrich	Cleveland, O....	Union Dairy Co.....	Cleveland, O.
699	H. M. Stanton	Cleveland, O....	Swift.....	Chicago, Ill.
726	J. Gardner.....	Columbus, O		
759	.....	Cincinnati, O		
832	C. O. Fisher.....	Columbus, O		
834	Saul & Eberly.....	Columbus, O		
871	Saul & Eberly.....	Columbus, O		
1	Waverly House.....	Massillon, O		
5	W. A. Clark.....	Cleveland, O		
6	C. Kelso.....	Cleveland, O		
8	R. Meyers.....	Cleveland, O		
9	J. Bickell.....	Cleveland, O		
10	Bissell's Restaurant ..	Cleveland, O....		
23	W. Genrich.....	Cleveland, O		
24	W. Genrich.....	Cleveland, O		
26	G. Krichle	Cleveland, O		
28	H. Hartman.....	Cleveland, O		
41	Campbell Bros	Cleveland, O....	Union Dairy Co.....	Cleveland, O.
44	M. Hangst	Cleveland, O....	F. Seither.....	Cleveland, O.
45	J. L. Fontaine.....	Cleveland, O....	F. Seither.....	Cleveland, O.
46	H. Nelson.....	Cleveland, O....	Friedman Sons.....	Chicago, Ill.
50	F. Seither.....	Cleveland, O....	F. Seither.....	Cleveland, O.

OLEOMARGARINE—DESCRIPTION OF SAMPLES—Concluded.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
57	W. A. Betz	Cleveland, O.		
39	W. Genrich	Cleveland, O.	F. Seither	Cleveland, O.
103	W. A. Betz	Cleveland, O.	Union Dairy Co.	Cleveland, O.
104	W. H. Phillips	Cleveland, O.		
135	Model Restaurant	Cleveland, O.		
13	Lett & Co	Cincinnati, O.	Wm. Barday	Covington, Ky.
27	T. Foster	Cincinnati, O.	Maxley & Co	Chicago, Ill.
28	T. Foster	Cincinnati, O.	Maxley & Co	Chicago, Ill.
29	T. Foster	Cincinnati, O.	Maxley & Co	Chicago, Ill.
35	C. L. Hinton	Dayton, O.	Maxley & Co	Chicago, Ill.
36	Bechel House	Dayton, O.		
39	J. Honchemeyer	Cincinnati, O.		
52	J. H. Lueken	Cincinnati, O.		
53	J. Honchemeyer	Cincinnati, O.		
54	J. Honchemeyer	Cincinnati, O.		
55	J. H. Lueken	Cincinnati, O.		
2	J. Holmes	Cleveland, O.		
3	W. A. Betz	Cleveland, O.	F. Seither	Cleveland, O.
78	Cooper Hotel	Dayton, O.		
79	Dickey House	Dayton, O.		
108	H. Sickling	Cincinnati, O.		

ANALYSIS OF SAMPLES.

No.	Butter Fat.	Other Fats.	Color.	Chemist.	Remarks.
693	12.00	88.00	Annatto.	H. A. Weber	Yellow.
694	11.00	89.00	Methyl Or'nge	"	"
695	17.00	83.00	Annatto.	"	"
696	12.00	88.00	Methyl Or'nge	"	"
697	15.00	85.00	Annatto.	"	"
698	16.00	84.00	"	"	"
699	16.00	84.00	Methyl Or'nge	"	"
726	7.00	93.00	"	"	Sold for butter
769	9.49	90.51	Butter Yellow	"	Yellow.
832	7.00	93.00	Methyl Or'nge	"	"
834	12.00	88.00	"	"	"
871	7.00	93.00	Annatto.	"	"
1	2.90	97.10	"	A. W. Smith.	Sold for butter
5	2.30	97.70	Methyl Or'nge	"	"
6	2.19	98.80	"	"	"
8	2.80	97.20	"	"	"
9	1.60	98.40	"	"	"
10	4.40	95.60	"	"	"
23	78.10	21.90	Annatto.	"	"
24	1.50	98.50	Methyl Or'nge	"	Yellow.

OLEOMARGARINE—ANALYSIS OF SAMPLES—Concluded.

No.	Butter Fat.	Other Fats.	Color.	Chemist.	Remarks.
26	1.80	98.20	MethylOr'nge	A. W. Smith.	Yellow.
28	5.10	94.90	"	"	"
41	8.03	91.97	"	"	"
44	10.20	89.80	"	"	"
45	6.60	93.40	"	"	"
46	2.90	97.10	"	"	"
50	4.40	95.60	"	"	"
57	5.10	94.90	"	"	Sold for butter
39	8.03	92.00	"	"	"
103	7.30	92.70	"	"	"
105	8.20	91.80	"	"	"
135	11.90	78.10	"	"	"
13	70.00	30.00	Artificial.	A. H. Otten.	"
27	None	100.00	"	"	"
28	"	100.00	"	"	"
29	"	100.00	"	"	"
35	6.00	94.00	"	"	"
36	3.00	97.00	"	"	"
39	5.00	95.00	"	"	"
52	10.00	90.00	"	"	"
53	18.00	82.00	"	"	"
54	12.00	88.00	"	"	"
52	13.00	87.00	"	"	"
2	3.60	96.00	MethylOr'nge	King.	Yellow.
3	7.00	93.00	"	"	Sold for Dairy Butter.
78	35.00	65.00	Artificial.	A. H. Otten.	Yellow.
79	40.00	60.00	"	"	"
108	11.00	89.00	"	Westernhoff.	Sold for butter

Pepper.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
715	Carson & Fox	Springfield, O	Silver King Spice Co	New York.
770	.....	.....	.....	.....
774	.....	New York.	.....	New York.
794	John Dabus	Piqua, O	S. Zollinger	Piqua, O.
795	H. Eicholtz	Casstown, O	Silver King Spice Co	New York.
796	M. Fox	Piqua, O	Silver King Spice Co	New York.
797	John Dabus	Piqua, O	J. K. McIntire	Dayton, O.
806	S. Zollinger	Piqua, O	E. W. Ropes & Co	New York.

PEPPER—DESCRIPTION OF SAMPLES—Concluded.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.
812	C. B. Clark & Co.	Ironton, O.	F. R. Farrington & Co.	New York.
813	Ketter Grocery Co.	Ironton, O.	W. H. Crawford & Co.	Baltimore, Md.
846	C. & J. Tea Store.	Steubenville, O.		
847	Elvin & Vanostram.	Uhrichsville, O.		
858	Balheim & Banta	Troy, O.	C. A. Trentman	Dayton, O.
865	H. N. Price.	W. Alex'ndria, O.	St. Claire & Co.	Greenville, O.
866	Eikenberry & Christopher.	W. Alex'ndria, O.	C. H. Heine & Co.	Cincinnati, O.
869	J. Hannon.	Ironton, O.	Ball Warfield Drug Co.	Ironton, O.
872	C. P. Worley	Portsmouth, O.	A. J. Finney	Portsmouth, O.
873	J. F. Horney.	Portsmouth, O.	M. B. Gilbert & Co.	Portsmouth, O.
876	Atlantic Tea Co.	E. Liverpool, O.		
877	Atlantic Tea Co.	Steubenville, O.	H. Bristol	
105	Sonnhalter Bros.	Massillon, O.	Crawford.	Baltimore, Md.
106	Grace & Sonnhalter.	Massillon, O.	Silver King Spice Co.	New York.
107	Beckel & Dumoulin.	Canton, O.	Silver King Spice Co.	New York.
125	E. E. Emerson	Cleveland, O.	Weideman & Co.	Cleveland, O.
126	F. S. McCloud.	Canton, O.	Thompson & Taylor	Chicago, Ill.
127	Byrider & Atwood.	Akron, O.		
1345	S. H. Leapley.	Troy, O.	People's W. G. Co.	Cincinnati, O.
47	Thos. Deck.	Swanton, O.	Toledo Spice Co.	Toledo, O.

ANALYSIS OF SAMPLES.

- 715** Ash 5.08
Highly adulterated with buckwheat flour
H. A. WEBER, Chemist.
- 770** Ash 3.10
Composed exclusively of ground fruit stones
probably olive stones.
H. A. WEBER, Chemist.
- 774** Ash 3.35
Consists of wheat bran and ground buckwheat.
H. A. WEBER, Chemist.
- 794** Ash 4.31
Consists of rice flour, roasted cocoanut shells,
cayenne pepper and pepper shells.
H. A. WEBER, Chemist.
- 795** Ash 5.90
Consists of buckwheat flour, roasted cocoanut
shells, cayenne pepper and very little
pepper.
H. A. WEBER, Chemist.

- 796** Ash 6.21
Consists of buckwheat flour, roasted cocoanut
shells, cayenne pepper and very little pepper.
H. A. WEBER, Chemist.
- 797** Ash 4.20
Consists of buckwheat flour, roasted cocoanut
shells, cayenne pepper and very little pepper.
H. A. WEBER, Chemist.
- 806** Ash 4.21
Consists of buckwheat flour, roasted cocoanut
shells, cayenne pepper and pepper shells.
H. A. WEBER, Chemist.
- 812** Ash 26.48
Consists of gypsum 23.00%
Rice hulls, crackers, cayenne pepper, little
pepper.
H. A. WEBER, Chemist.
- 813** Ash 16.00
Pepper 90.00
Gypsum 10.00
H. A. WEBER, Chemist.
- 846** Ash 2.67
Consists of buckwheat flour, rice flour, wheat
bran, cocoanut shells, cayenne pepper and
little pepper.
H. A. WEBER, Chemist.
- 847** Ash 10.62
Consists of corn meal, product of wheat and
pepper shells
H. A. WEBER, Chemist.
- 858** Ash 12.35
Consists of gypsum 10.00%
Rice hulls, rice flour, crackers or bread, corn
meal, cocoanut shells and a little pepper.
H. A. WEBER, Chemist.

- 865** Ash 5.20
Consists of turmeric, cocoanut shells, rice flour
rice hulls and a little pepper.
H. A. WEBER, Chemist..
- 866** Ash 11.84
Consists of sand, about..... 10.00%
Rice hulls, rice flour, crackers, roasted bread,
roasted peas and pepper.
H. A. WEBER, Chemist..
- 869** Ash..... 18.30
Gypsum 12.00
Pepper 88.00
H. A. WEBER, Chemist..
- 872** Ash 3.04
Consists of cayenne pepper, roasted cocoanut
shells, rice hulls, rice flour, crackers, roasted
bread and little pepper.
H. A. WEBER, Chemist..
- 873** Ash 4.72
Consists of cayenne pepper, ground buckwheat,
rice hulls, rice flour, roasted cocoanut shells,
bread or crackers and little pepper.
H. A. WEBER, Chemist..
- 876** Ash 11.35
Consists of gypsum, about..... 8.00
Cocoanut shells, rice hulls, rice flour, corn
meal, cayenne pepper and a little pepper.
H. A. WEBER, Chemist..
- 877** Ash 11.55
Consists of gypsum, about..... 8.00
Cocoanut shells, corn meal, rice hulls, rice
flour, cayenne and a little pepper.
H. A. WEBER, Chemist..

- 105** Ash..... 8.38
Consists of pepper, some product of wheat and
large proportion of dried hulls.
H. A. WEBER, Chemist.
- 106** Ash..... 5.83
Pepper, about.....50.00%
Rice flour, about.....50.00%
A. W. SMITH, Chemist.
- 107** Ash 4.32
Consists of rice flour, wheat product, charcoal
and some pepper.
A. W. SMITH, Chemist.
- 125** Ash..... 8.15
Consists of rice flour, wheat and pepper.
A. W. SMITH, Chemist.
- 126** Ash..... 3 50
Pepper25.00
Wheat, husks and charcoal.....75.00
A. W. SMITH, Chemist.
- 127** Ash..... 4.06
Pepper35.00
Wheat and rice flour65.00
A. W. SMITH, Chemist.
- 1345** Ash.....14.30
Clay, about.....10.00
Wheat flour.....25.00
Pepper.....65.00
G. A. KIRCHMAIER, Chemist.
- 47** Ash..... 6.30
Abnormal amount of pepper shells.
G. A. KIRCHMAIER, Chemist.

Vinegar.

DESCRIPTION OF SAMPLES.

NO.	DEALER.	ADDRESS.	PRODUCER.	ADDRESS.	MARKED.
709	C. M. Young.....	Washington, C. H.	Chandler & Co.	Cincinnati, O.	Pure.
711	Smith & Moore.....	Columbus, O.	Chandler & Co.	Cincinnati, O.	Ex. Pure.
712	J. Snyder.....	Springfield, O.	Huffman & Co.	Indianapolis	Malt.
714	R. Campbell.....	Columbus, O.			Crab Cider.
723	O. H. Neff.....	Springfield, O.	O. H. Neff	Springfield, O.	Pure Cider.
725	Ketter Grocery Co.	Ironton, O.	Price & Lucas	Louisville, Ky.	Crab Cider.
731	Saul & Eberly.....	Columbus, O.	Heinze Vinegar Co.	Pittsburg, Pa.	Pure Malt.
737	I. Lynd.....	Ironton, O.	Price & Lucas	Louisville, Ky.	Cider.
738	H. Pancake.....	Ironton, O.	Alden Vinegar Co.	St. Louis, Mo.	Country.
739	W. A. Murdock.....	Ironton, O.	R. M. Hughes & Co.	Louisville, Ky.	Special.
744	E. Fisher.....	Zanesville, O.	Pinkerton Bros.	Zanesville, O.	Cider.
745	S. Brown.....	Columbus, O.			Cider.
773	Conn & Co.....	Van Wert, O.	Price & Lucas	Louisville, Ky.	Cider.
776	C. D. Smith.....	Athens, O.	F. C. Stedman	Athens, O.	Cider.
837	J. G. Muth.....	Bellaire, O.		Wheeling, W. Va.	Cider.
863	Roselins Glander	W. Alexandria, O.	J. K. McIntire	Dayton, O.	Pickle.
864	Eikenberry & Christopher,	"			
875	M. B. Gilbert & Co.	Portsmouth, O.	O. Valley Vinegar Co.	Cincinnati, O.	Malt.
887	C. P. Worley..	Portsmouth, O.	Eclipse Vin. Works.	Louisville, Ky.	Cider.
888	C. P. Worley.....	Portsmouth, O.	Eclipse Vin. Works.	Louisville, Ky.	Malt.
911	J. Orr's Sons.....	Steubenville, O.	O. Valley Vinegar Co.	Cincinnati, O.	
3		Massillon, O.			Cider.
4	Morgan & Co.....	Massillon, O.	Alden Vinegar Co.	St. Louis, Mo.	Vinegar
12	H. P. Ward.....	Cleveland, O.			Vinegar.
13	Rupender & Co.....	Cleveland, O.			Pure Malt.
14	Williams Bros.....	Cleveland, O.	Williams Bros.	Detroit, Mich.	Pure Malt.
15	Highland Vin. Co.	Cleveland, O.			Colored.
16	Highland Vin. Co.	Cleveland, O.			Pure Malt.
19	A. F. Holister.....	Youngstown, O.	Cider Vinegar Works.		White Wine.
20	W. J. Neville.....	Youngstown, O.	Ky. Fruit G. Asso.	Louisville, Ky.	Pure Crab.
21	McKelvey Co.....	Youngstown, O.	Heinz & Co.	Pittsburg, Pa.	Standard Malt.
22	Clegg Bros.....	Youngstown, O.	Cruikshank Bros. Co.	Allegheny City	Cider.
31	A. S. Beecher.....	Cleveland, O.	Price & Lucas	Louisville, Ky.	Apple.
32	A. S. Beecher.....	Cleveland, O.	Price & Lucas	Louisville, Ky.	Malt.
47	Morris & Abel.....	Cleveland, O.	Forest City Vin. Wks.	Cleveland, O.	Pure Cider.
67	C. Herman.....	Cleveland, O.	San. Cider Vin. Wks.	Sandusky, O.	Cider.
69	J. Wise.....	Akron, O.	San. Cider Vin. Wks.	Sandusky, O.	Pure Cider.
70	Mitchell & Reed...	Akron, O.	Berea Vinegar Co.	Berea, O.	Pure Cider.
74			San. Cider Vin. Wks.	Sandusky, O.	Pure Cider.
81	Baldwin & Morgan	Youngstown, O.	P. Duff & Son	Pittsburg, Pa.	Pure Cider.
36	Banks, Balinger & Co.	Cleveland, O.	P. Duff & Son	Pittsburg, Pa.	Pure Cider.
40	Banks, Balinger & Co.	Cleveland, O.	P. Duff & Sons	Pittsburg, Pa.	
86	J. Coodman.....	Cleveland, O.	Williams Bros.	Detroit, Mich.	Cider.
87	J. Goodman.....	Cleveland, O.	Williams Bros.	Detroit, Mich.	Cider.
96	G. F. Breckel.....	Massillon, O.	Price & Lucas	Louisville, Ky.	Apple.
108	Stinchcomb, Henry & Co.	Cleveland, O.	Highland Vinegar Co.	Cleveland, O.	Vinegar.
16	Union Vinegar Co.	Cincinnati, O.	Union Vinegar Wks.	Reading, O.	Wine.
17	V. Prinz & Son.....	Cincinnati, O.	V. Prinz & Son	Cincinnati, O.	Pure Apple.
19	F. Miller Vin. Co.	Cincinnati, O.	F. Miller Vin. Co.	Cincinnati, O.	Malt.
21	W. Wilke, Jr.....	Cincinnati, O.	W. Wilke, Jr.	Cincinnati, O.	Wine.
1	M. Able.....	Cincinnati, O.	Forest City Vin Wks.	Cleveland, O.	Pure Cider
4	Weidman Co.....	Cleveland, O.	C. H. Strube	Sandusky, O.	Cider.
119	J. G. Janson.....	Cleveland, O.	Red Cross Vinegar Co.	St. Louis, Mo.	Apple.
1339	F. Cone.....	Findlay, O.	San. Vinegar Co.	Sandusky, O.	Cider.
1330	F. Cross.....	Findlay, O.	San. Vinegar Co.	Sandusky, O.	Cider.
1324	G. W. Finch.....	Toledo, O.			Cider.
50	Food & Brankey...	Bowling Green, O.	J. M. Baur Co.	Toledo, O.	Cider.
63	Iddings & Fisk.....	Celina, O.	Humphreys & Hughs.	Van Wert, O.	Malt.
64	S. T. Johnson.....	Celina, O.	C. C. Gleason & Son	Van Wert, O.	Cider.
67	J. A. Mattier.....	Kenton, O.	B. T. Chandler & Co.	Cincinnati, O.	Malt.

VINEGAR—ANALYSIS OF SAMPLES.

No.	Solids.	Ash.	Acetic Acid	Color.	Chemist.
709	0.23	0.03	3.00	Caramel.	Weber.
711	0.39	0.04	3.60	"	"
712	0.39	0.04	3.60	"	"
714	0.40	0.06	3.00	"	"
723	1.71	0.27	3.60	None.	"
725	0.21	0.02	3.30	Caramel.	"
730	1.86	0.14	3.90	None.	"
737	1.01	0.12	3.06	"	"
738	0.43	0.15	3.12	Caramel.	"
739	0.25	0.04	3.12	"	"
744	0.33	0.06	3.00	"	"
745	1.17	0.21	4.14	None.	"
773	0.18	0.03	2.40	Caramel.	"
776	0.41	0.09	3.90	"	"
837	2.47	0.09	4.80	"	"
863	0.28	0.04	4.26	"	"
864	0.30	0.03	4.68	"	"
875	0.32	0.05	3.48	"	"
887	0.37	0.05	3.48	"	"
888	0.30	0.05	3.48	"	"
911	0.30	0.04	4.32	"	"
3	0.14	0.03	3.47	"	A. W. Smith.
4	0.43	0.15	3.15	"	"
12	0.58	0.02	4.33	"	"
13	0.21	0.06	2.87	"	"
14	0.28	0.03	3.40	"	"
15	0.16	0.02	3.88	"	"
16	0.23	0.03	7.23		"
19	0.42	0.10	5.10		"
20	0.24	0.04	4.38	Caramel.	"
21	1.36	0.47	4.05		"
22	0.24	0.01	2.85		"
31	0.34	0.04	3.58	Caramel.	"
32	0.24	0.04	2.94	"	"
47	1.53	0.18	3.76	"	"
67	1.42	0.20	3.65		"
69	1.19	0.14	3.44		"
70	0.59	0.13	3.54		"
74	1.68	0.24	3.43	Caramel.	"
81	0.42	0.13	3.27	"	"

VINEGAR—ANALYSIS OF SAMPLES—Concluded.

No.	Solids.	Ash.	Acetic Acid	Color.	Chemist.
36	1.20	0.18	4.10	Caramel.	A. W. Smith.
40	1.41	0.17	3.74	"	"
86	0.24	0.03	3.32	"	"
87	0.27	0.04	3.12	"	"
96	0.36	0.09	2.98	"	"
108	0.24	0.06	3.44	"	"
16	0.20	0.02	6.75	Colorless.	A. H. Otten.
17	1.04	0.17	6.25		"
19	0.30	0.03	7.10	Artificial.	"
21	0.38	0.01	6.50	Colorless.	"
1	1.18	0.13	3.75	Caramel.	King.
4	1.28	0.19	3.51		"
119	1.29	0.17	4.11		Schmidt.
1329	1.30	0.23	3.72		Kirchmaier.
1330	1.26	0.18	3.84		"
1324	0.28	0.05	2.64	Caramel.	"
50	1.06	0.26	3.69		"
63	0.34	0.06	4.62	Caramel.	"
64	1.34	0.20	2.40	"	"
67	0.58	0.04	4.26	"	"

Cider Vinegar.

ANALYSIS OF SAMPLES.

No.	Solids.	Ash.	Acetic Acid	Chemist.	Remarks.
701	3.13	0.37	4.20	H. A. Weber.	Pure.
713	2.54	0.32	4.20	"	"
722	2.00	0.31	4.50	"	"
732	2.96	0.34	4.08	"	"
835	2.29	0.56	4.17	"	"
890	2.60	0.27	3.78	"	"
85	2.41	0.27	4.26	A. W. Smith.	"
88	2.80	0.35	4.74	"	"

Malt Vinegar.

ANALYSIS OF SAMPLES.

No.	Solids	Ash.	Acetic Acid	Chemist.	Remarks.
747	2.46	0.30	6.00	H. A. Weber.	Pure Malt.
766	2.61	0.23	4.56	"	" "

Wine and Cider.

DESCRIPTION AND ANALYSIS OF SAMPLES.

759	Sweet Catawba from August Schmidt jr., Sandusky, O.	
	Alcohol	10.61
	Free acid as tartaric	00.60
	Reducing sugar	18.18
	Solid extract	20.40
	Ash	0.17
	Contains salicylic acid.	

H. A. WEBER, Chemist.

833	Sweet crab cider from Dennis Kelly, Columbus, O.	
	Solid Extract	7.98
	Ash	0.41
	Salicylic acid in 1 pint	4.65 gr.
	Salicylic acid in 1 bbl. of 40 gallons	3.4 oz.

H. A. WEBER, Chemist.

58	Blackberry wine from M. Bernstein, Cleveland, O.	
	Extract	24.50
	Volatile acid as acetic	0.35
	Reducing sugar	17.90
	Glycerine	0.26
	Alcohol	9.20
	Contains salicylic acid.	

A. W. SMITH, Chemist.

64	Catawba wine from J. Ettinger, Cleveland, O.	
	Extract	1.42
	Alcohol	11.95
	Reducing sugar	0.18
	Glycerine	0.51
	Acid as tartaric	0.22
	Acid as acetic	0.45
	Contains salicylic acid.	

A. W. SMITH, Chemist.

- 870** Sweet cider from Peter Schille, Columbus, O.
Salicylic acid in 1 pint..... 3.6 gr.
Salicylic acid in 1 bbl. of 40 gallons..... 2.6 oz.
H. A. WEBER, Chemist.

- 75** Blackberry wine from M. Bernstein, Cleveland, O.
Extract.....20.47
Fixed acidsNone
Acid as acetic 0.33
Glycerine..... 0.22
Reducing sugar.....18.00
Cane sugar 3.40
Alcohol10.14
Contains salicylic acid and red aniline dye.
A. W. SMITH, Chemist.

- 111** Blackberry wine from M. Bernstein, Cleveland, Ohio.
Extract.....16.96
Ash 0.15
Sugar.....16.24
Alcohol12.10
Glycerine..... 0.30
Volatile acids 0.50
Contains salicylic acid.
A. W. SMITH, Chemist.

- 18** Pomace wine, Old Catawba Island Wine Co., Catawba Island, O.
Alcohol 8.14
Acid as tartaric..... 0.37
Acid as acetic 0.36
Reducing sugar..... 0.12
Glycerine..... 0.46
Total solids..... 1.40
Ash 0.25
Preservatives.....None
Color, artificially.....None
G. A. KIRCHMAIER, Chemist.

- 1335** Cider marked pure juice, from E. A. Lacy,
Toledo, O. Producer, Duffy Cider Co.,
Rochester, N. Y.
- | | |
|---------------------|-------|
| Acid as malic | 0.17 |
| Extract..... | 13.50 |
| Fruit sugar | 2.50 |
| Ash .. | 0.34 |
- Contains salicylic acid.

G. A. KIRCHMAIER, Chemist.

- 1336** Cider from A. A. Geroe & Son, Toledo, O.
Producer, Niagara Cider and Vinegar Co.,
Tonawanda, N. Y.
- | | |
|--------------------|-------|
| Acid as malic..... | 0.19 |
| Extract..... | 15.24 |
| Fruit sugar..... | 2.50 |
| Ash | 0.24 |
- Contains salicylic acid.

G. A. KIRCHMAIER, Chemist.

Miscellaneous.

- 724** Ice cream from Dispatch Office, Columbus, Ohio.
 Cream10.00
 Gelatine and sugar.....25.00
 Water65.00
 H. A. WEBER, Chemist.
- 821** "Preservaline" a white granular powder used as preservative for food,
 Sodium benzoate100.00
 H. A. WEBER, Chemist.
- 822** "Preservaline" a heavy liquid used as a food preservative. This sample was found to be a standard solution of salicylic acid and alcohol.
 H. A. WEBER, Chemist.
- 66** Olive oil from A. Soeter, Cleveland, Ohio.
 Specific gravity at 15°9235
 Rise of temperature, sulphuric acid.....72.3°
 Iodine absorption106.8%
 Cotton seed oil100.00%
 A. W. SMITH, Chemist.
- 72** Olive oil from Chas. Herman Grocery Co., Cleveland, O. Producer, Thurber, Wyland & Co., New York.
 Specific gravity at 15°9237
 Rise of temperature, sulphuric acid.....73.5°
 Iodine absorption.....106.1%
 Cotton seed oil100.%
 A. W. SMITH, Chemist.
- 76** Olive oil from Herman McLean Co., Cleveland, O. Producer, Thurber, Wyland & Co., New York.
 Specific gravity at 15°9246
 Rise of temperature with sulphuric acid.....72.30
 Iodine absorption.....106.8%
 Cotton seed oil100.00%
 A. W. SMITH, Chemist.

78	Condensed milk from Atlantic and Pacific Tea Co., Cleveland, O. Producer, Clover Condensed Milk Co., Detroit, Mich.
	Total Solids.....73.63
	Fat.....5.18
	Ash.....1.81
	Sucrose.....5.04
	Reducing Sugar.....11.13

A. W. SMITH, Chemist.

1326	Buckwheat flour, self-rising, from Berdan & Co., Toledo, O. Producer, Geiger-Wagner Co., Lafayette, Ind.
	Buckwheat flour.....90.00
	Wheat flour.....10.00
	Ash.....4.80
	Salt.....2.50

G. A. KIRCHMAIER, Chemist.

1344	Buckwheat flour, from C. Johnson, Toledo, O. Producer, Fallis & Co., Toledo, O.
	Buckwheat flour.....90.00
	Wheat flour.....10.00

G. A. KIRCHMAIER, Chemist.

56	Grape Jelly (pure fruit goods), from H. D. Wood & Co., Toledo, O. Producer, American Preserves Co., Buffalo, N. Y.
	Glucose.....26.50
	Total solids.....69.00
	Ash.....0.29
	Color, magenta.
	Artificial flavor.

G. A. KIRCHMAIER, Chemist.

55	Peach jelly, (from fruit goods), from Berdan & Co., Toledo, O. Producer, American Preserves Co., Buffalo, N. Y.
	Glucose.....26.50
	Total solids.....65.00
	Ash.....0.32
	Artificially colored and flavored.

G. A. KIRCHMAIER, Chemist.

- 65** Buckwheat flour, from C. A. Strumph, Cincinnati, O. Producer, W. H. Harrison, Cincinnati, O.
 Buckwheat flour80.00%
 Wheat flour.....20.00%
 A. H. OTTEN, Chemist..
- 66** Buckwheat flour from Durst Milling Co., Dayton. O.
 Buckwheat flour80.00
 Wheat flour.....20.00
 A. H. OTTEN, Chemist..
- 76** Buckwheat flour from Meyer & Ernest, Cin'ti, O. / Producer, Cohocton Milling Co., N. Y.
 Buckwheat flour80.00
 Wheat flour.....20.00
 A. H. OTTEN, Chemist..
- 80** Buckwheat flour from Heathman Branch U. S. Baking Co., Dayton, O. Producer, same.
 Buckwheat flour75.00
 Wheat flour.....25.00
 A. H. OTTEN, Chemist..
- 86** Sneider's catsup, from J. A. Sneider Preserve Co., Cincinnati, O. Producer, same.
 Contains salicylic acid and artificial coloring matter.
 A. H. OTTEN, Chemist..
- 96** Currant jelly from Hamilton & Co., Cincinnati, O. Producer, American Preserve Co., Cincinnati, O.
 Artificially colored and flavored.
 A. H. OTTEN, Chemist..
- 118** Olive oil from W. H. Echler & Co., Pleasant Ridge, O.
 Cotton seed oil20.00
 Olive oil.....80.00
 SCHMIDT, Chemist.

- 1313** Strawberry jelly from Thos. Freeman, Sandusky, O. Producer, H. E. Goodwin, Indianapolis, Ind.

Total solids64.24

Glucose26.25

Ash 0.43

Artificial color and contains no fruit juice.

G. A. KIRCHMAIER, Chemist.

- 1327** Plum jelly from E. M. Kean, Toledo, O. Producer, American Preserves Co., Buffalo, New York.

Total solids66.20

Glucose26.75

Ash 0.29

Color, magenta.

Artificial flavor.

G. A. KIRCHMAIER, Chemist.

- 1325** Buckwheat flour, King's quick rising, from Pliney, Watson & Co., Toledo, O.

Buckwheat flour90.00

Wheat10.00

Ash 4.23

Salt 2.00

G. A. KIRCHMAIER, Chemist.

- 143** Evaporated cream, from The Weidman Co., Cleveland, O. Producer, St. Charles Cream Co., St. Charles, Ill.

Sugar of milk.....10.6

Cane sugar.....None

Fat 8.11

Total solids.....27.30

Ash..... 1.62

2½ Volumes of milk condensed to 1 volume.

Falsely labelled.

A. W. SMITH, Chemist.

- 144** Condensed milk, from The Weidman Co.,
Cleveland, O. Producer, Gail Borden, N. Y.
Milk sugar.....10.50
Cane sugar.....38.00
Total Solids.....73.50
Fat.....8.90
Ash.....1.79
A. W. SMITH, Chemist.
- 148** Olive Oil, from John McKee, Jr., Warren, O.
Producer, Burgess & Ross, Cleveland, O.
Consists entirely of Cotton seed oil.
A. W. SMITH, Chemist.
- 1** Lard from Daniel Lane, Cincinnati, O. Pro-
ducer, J. & F. Schroth, Cincinnati, O.
Adulterated with Stearine.
A. H. OTTEN, Chemist.
- 3** Lard from I. J. Donnelly, Cincinnati, O.
Producer, J. & F. Schroth, Cincinnati, O.
Adulterated with Stearine.
A. H. OTTEN, Chemist.
- 4** Lard from P. McHue, Cincinnati, O. Pro-
ducer, Benninger, Cincinnati, O.
Adulterated with Stearine.
A. H. OTTEN, Chemist.
- 5** Lard from C. Sunderman, Cincinnati, O.
Producer, Jacob Vogel, Cincinnati, O.
Adulterated with Stearine and Cotton-seed oil.
A. H. OTTEN, Chemist.
- 6** Lard from Jos R. Peebles' Sons, Cincinnati, O.
Producer, Geo. F. Davis, Cincinnati, O.
Adulterated with Stearine.
A. H. OTTEN, Chemist.
- 45** Currant Jelly from W. M. Spencer & Son,
Cincinnati, O. Producer, W. M. Spencer
& Son, Cincinnati, O.
Colored and flavored artificially.
A. H. OTTEN, Chemist.

- 46 Saratoga Chips from Hamberg & Newburg.
Said to be manufactured in Philadelphia, Pa.

Alum	0.93
Water	4.15
Lard.....	14.00
Salt.....	2.50
Potatoes.....	78.42

A. H. OTTEN, Chemist.

- 60 Peach Jelley manufactured by Wm. Spencer
& Son, Cincinnati, O.

Found to be colored and flavored artificially.

A. H. OTTEN, Chemist.

- 92 Olive oil from F. A. Miller, Canton, O.
Pure cotton-seed oil.

A. W. SMITH, Chemist.

- 93 Olive oil from J. J. Lippert, Canton, O.

Specific gravity at 15°9177

Rise of temperature, with sulphuric acid....55°

Iodine absorption93.%

Reaction of cotton-seed oil. Mixture.

A. W. SMITH, Chemist.

- 94 Olive oil from W. A. Pietzeker, Massillon,
O. Producer, C. L. McLean & Co., Mas-
sillon, O.

Pure cotton-seed oil.

H. A. WEBER, Chemist.

- 95 Buckwheat flour, Forest City self-raising.

Ash 5.15

Buckwheat flour about.....50.00%

Wheat flour about50.00%

Ash contains calcium, phosphate, aluminum
sulphate and sodium sulphate.

A. W. SMITH, Chemist.

- 140 Lard from James Leonard, Canton, O.

The sample is a mixture of stearine and cotton-
seed oil.

A. W. SMITH, Chemist.

- 110** I. X. L. buckwheat flour from E. E. Emerson, Cleveland, O. Producer, Barber & Bennett, Albany, N. Y.

Ash 5.71
 Buckwheat flour about.....50.%
 Wheat flour about50.%
 Contains sodium bicarbonate, acid phosphate,
 salt and gypsum.

H. A. WEBER, Chemist.

- 113** Buckwheat flour from Best & Co., Canton, O. Producer, J. M. Ball, Canton, O.

Ash 4.33
 Buckwheat flour about.....75.00%
 Wheat flour about25.00%
 Contains sodium bicarbonate, acid phosphate,
 salt and gypsum.

A. W. SMITH, Chemist.

- 114** Olive oil from A. R. Sell & Bros., Canton, O. Producer, F. Duport, Bordeaux, France.

Rise of temperature with sulphuric acid.....57.5°
 Specific gravity at 15.5°9193
 Iodine absorption.....92.1%
 Contains cotton-seed oil35.%

A. W. SMITH, Chemist.

- 130** Buckwheat flour from W. C. Bonsedt, Akron, O. Producer, American Cereal Co., Akron, O.

Ash 0.85
 Buckwheat flour50.00%
 Wheat flour.....50.00%

A. W. SMITH, Chemist.

- 139** Leaf lard from Anerbach Bros., Cleveland, O. Producer, Swift & Co., Chicago, Ill.

This sample is a mixture of cotton-seed oil
 and stearine.

A. W. SMITH, Chemist.

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112

113

114

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U6 034 Ohio. Dairy and
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1893 Chemists' report of
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